

Work Order ID 165757

165757

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Monday, August 28, 2017 10:52:40 AM

Item ID: D4777-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Rod End Bearing
 Start Date: 8/28/2017 Start Qty: 10.00 ***10*** Cust Item ID:
 Required Date: 9/1/2017 Req'd Qty: 10.00 ***10*** Customer:

Reference: **DAS 13 9-09**
 Approvals: Process Plan: **DAS 13 9-09** Date: **AUG 28 2017** Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4777	A								
100	PURCHASING	0.00					DAS 13 9-09		
100									
Purchasing	Memo	0.00							
Purchasing	Issue P/O: <u>376000</u>								<u>10</u> <u>1008</u> AUG 30 2017
	Purchase Part Number: 59915K274 Supplier: Mc Master Carr or CTG								
	Certificate of conformity is required								
110	Receive & Inspect for Damage & Mat'l Certs	0.00							
110									
Packaging	Memo	0.20							
Packaging	Ensure certificate of conformity is attached								<u>10 x 8017-9-5</u>
120	QC6- All purchased or subcontracted products	0.00							
120									
QC	Memo	0.00							
Quality Control									<u>10</u> <u>11-09-05</u> <u>PD</u>

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER :					

Work Order ID 165757***165757***

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Monday, August 28, 2017 10:52:40 AM

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Revision ID: Stop ***NS2***
Item Name: Rod End Bearing
Start Date: 8/28/2017 Start Qty: 10.00 ***10*** Cust Item ID:
Required Date: 9/1/2017 Req'd Qty: 10.00 ***10*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>5115</u>	0.00							
130									
Packaging	Memo	0.10							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	1.00							
Quality Control									

10 SEP 06 2017 DAS 6 9-89

17/9/11

SEP 06 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Monday, August 28, 2017 10:52:39 AM

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Work Order ID: 165757

165757

Parent Item: D4777-1

D4777-1

Parent Item Name: Rod End Bearing

Start Date: 8/28/2017

Required Date: 9/1/2017

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP REV:A 12.10.03 NEW ISSUE DD VERF:JFS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
59915K274		Purchased		No		110	Each	0.0000	1	10			
59915K274									**				
Rod End Bearing													

10x SP 17-9-S

DQA: _____ Date: _____



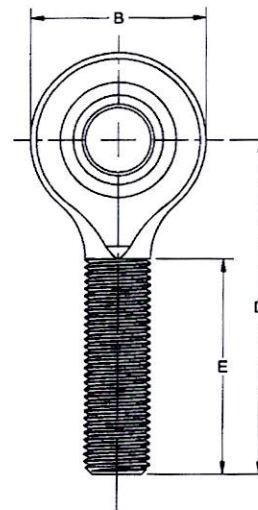
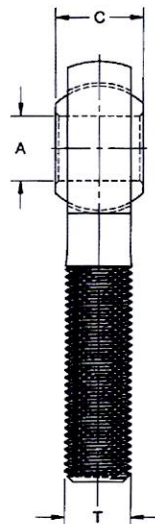
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
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Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

SPECIFICATION CONTROL DRAWING



ROD END BEARING

AUG 28 2017
DAS
13
9-89

W/O: 165757

DART P/N	HOUSING MATERIAL	A	B	C	D	E	T (THREAD SIZE)	SUGGESTED SUPPLIER	SUGGESTED SUPPLIER P/N
D4777-1	STAINLESS STEEL	Ø 0.38	1.00	0.500	1.94	1.25	3/8-24 (RIGHT HAND)	MC MASTER CARR	59915K274

RELEASED
2013-08-14

A	NEW ISSUE	AJS	13.08.08
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS		
DRAWN	AJS		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	13.08.08		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D4777** REV. A
SHEET 1 OF 1

TITLE **ROD END BEARING** SCALE NTS

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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO37600**

Purchase Order Date 8/29/2017

PO Print Date 8/30/2017

Page Number 1 of 7

Order From :
MCMaster-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

VU-MCM001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

AUG 30 2017

Contact Name
Vendor Phone 330 995 5500

Ship To Contact
Ship To Phone
Ship Via: Purolator ground ppd
Ship Acct:

Buyer Chantal Lavoie
Customer POID
Customer Tax # 10127-2607
Terms Net 10
Currency USD
FOB FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	MC1095S.020	C1095 Blue Tempered Spring Steel Sheet .020 mcmaster p/n: 9036K499	9/1/2017 Yes 9/1/2017		12.00 sf	\$7.61	\$91.29
Line Total:							\$91.29
2	98470A133	Pin, Quick Release	9/1/2017 Yes 9/1/2017		10.00 Each	\$3.01	\$30.10
Line Total:							\$30.10
3	59915K274	Rod End Bearing	9/1/2017 Yes 9/1/2017		10.00 Each	\$19.05	\$190.50

As per Dwg D4811 Rev.A
B165758

As per Dwg D4777 Rev.A
B165757

SP A-9-5

Note:

8/30/2017

00 Aurora Industrial Pkwy
Aurora OH 44202-8087
30-995-5500
le.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO37600
Order Placed By
Chantal Lavoie

Page 1 of 2
08/30/2017

McMaster-Carr Number
7980430-02

Line	Product	Ordered	Shipped
9036K499	Wear-Resistant 1095 Spring Steel, 0.0200" Thick, 6" Wide, 20 Feet Long	1 Each	1
98470A133	Shoulder-Style Ring-Grip Quick-Release Pin, 18-8 Stainless Steel, 1/4" Diameter, 1-5/16" Usable Length	10 Each	10 ✓
59915K274	Corrosion-Resistant Ball Joint Rod End, 3/8"-24 Thread, Right Hand <i>SP179-5</i>	10 Each	10 ✓
6937T8	Glazing Sealant, Sika 295, 10.1 oz., Black	1 Each	1 ✓
6308K49	Plastic Tapered Handle with Revolving Grip, M8 x 1.25mm Threaded Stud, 65mm Long	1 Each	1
6308K44	Plastic Tapered Handle with Revolving Grip, 3/8"-16 Threaded Stud, 3-1/8" Long	1 Each	1 ✓
4125A186	Band Saw Blade for Straight Cuts, 1/2" Wide x 0.025" Thick, 140" Long, 14 Teeth Per Inch	4 Each	4 ✓
46325A93	Backup Pad for 3" Quick-Change Sanding Disc	8 Each	8
5858A15	Ball Peen Hammer with Steel Handle, 8 oz.	2 Each	2 ✓
4689A26	Pedestal with Tool Tray and Water Pot	2 Each	2 ✓
4689A14	Light Duty Bench Grinder for 8" Wheel Diameter	1 Each	1 ✓
5557K33	Teflon FEP Semi-Clear Tubing for Chemicals, Flexible, 4 mm ID, 6 mm OD, 10 Feet Long	10 Feet	10
4880K26	Standard-Wall PVC Pipe Fitting for Water, 90 Degree Elbow Connector, White, 2 Socket-Connect Female	1 Each	1
6641A41	Flexible Gasket Maker Sealant, Loctite 598, 2.36 oz. Tube	15 Each	15 ✓
8739K72	White Delrin® Acetal Resin Oversized Bar, 1-3/4" Thick, 1" Wide	3 Feet	3

Shipped separately from our Atlanta warehouse on 08/30

6603A52	Lock-Open/Lock-Closed Drawer Slides, 30" Closed Length	8 Pairs	8
8497K691	Acetal Rod, White, 10" Diameter, 1 Foot Long	2 Feet	2

Packing List

200 Aurora Industrial Pkwy
Aurora OH 44202-8037
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO37600

Order Placed By
Chantal Lavoie

McMaster-Carr Number
7980430-02

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08/30/2017

SPA-9-5

Certificate of compliance

This is to certify that the above items were supplied in accordance with the description and as illustrated in the catalog. Your order is subject only to our terms and conditions, available at www.mcmaster.com or from our Sales Department.

Sarah Weinberg

Sarah Weinberg
Compliance Manager